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This report of a conference, held under the auspices of the Department of Foreign Languages of the University of Bridgeport, is concerned primarily with improved foreign language teaching and flexible scheduling practices. In the first part of the report, the text of a speech suggests that fundamental changes in curriculum content revision, instructional purpose and group size, flexible schedules, educational facilities, evaluation techniques, the instructional system, and reeducating teachers for changed roles, can significantly improve modern foreign language teaching and learning. The second part includes discussions of (1) flexible scheduling practices in Brooklyn College, (2) working experiments in modular scheduling at Farmington High School, (3) the effect of flexible scheduling on language instruction at North Haven High School, and (4) three kinds of flexible scheduling related to different team teaching patterns. (AF)

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Report of

FIRST ANNUAL CONFERENCE

Flexible Scheduling

and

Foreign Language Teaching

Sponsored by the

Department of Foreign Languages

University of Bridgeport

Saturday, December 14, 1968

9:30 A.M. - 12:30 P.M.

University of Bridgeport

#### PROGRAM

9:30 - 10:00 A.M. - Registration and coffee hour, Social Room, Student Center

10:00 A.M. - Opening of conference, Dr. James Etmekjian, Chairman

Greetings, Dr. Karl Larsen, Dean, College of Arts and Sciences, University of Bridgeport

Address: "What's Wrong with Your Present Schedule?" Dr. J. Lloyd Trump, National Association of Secondary School Principals

Social Room, Student Center

11:15 A.M. - Panel discussion: "Implications of Flexible Scheduling for Foreign Language Teaching"

Social Room. Student Center

#### **PANELISTS**

- Mr. Frederick Burkhardt, Teacher of French, Farmington High School, Farmington, Connecticut
- Dr. Charles Hill, Associate Professor of French, Brooklyn College, Brooklyn, New York
- Dr. William Jassey, Foreign Language Consultant, Norwalk Public Schools Moderator
- Dr. Delio Rotondo, Principal, North Haven High School, North Haven, Connecticut
- Dr. Ira J. Singer, Assistant Superintendent in Charge of Instruction and Special Services, West Hartford Public Schools

## IMPROVING MODERN LANGUAGE TEACHING AND LEARNING

-J. Lloyd Trump

This presentation develops the thesis that significant improvement in modern language teaching and learning requires <u>fundamental changes</u> in the organization of instruction. Stated more specifically, this means that new developments in teaching will produce superior learning outcomes for students only if:

- 1. the curriculum content is revised further to provide a more logical, sequential organization;
- 2. the size of pupil groups is varied with different purposes of instruction;
- 3. rigid time arrangements are replaced by flexible schedules;
- 4. educational facilities are used more efficiently and economically;
- 5. evaluation techniques are altered;
- 6. all aspects of the teaching-learning process are related in an <u>instructional system</u>;
- 7. teachers are reeducated to use the new system and in the process develop changed professional roles.

#### 1. Further Revision in Curriculum Content

The needed design for content in every school subject may be viewed as a two-dimensional grid. The vertical extension shows the knowledge, skills, and attitudes proposed for the subject starting from the first contacts the student has with the area and presenting a logical, sequential development upward to various levels of achievement. The horizontal dimension recognizes individual differences among students in their talents and motivation.

Modern foreign language teaching needs to be "non graded" with frequent reassignment of students according to achievement. A logical, interrelated sequence of listening, speaking, reading, and writing also is indicated. These arrangements apply regardless of the student's age or the year in school in which language instruction is started or resumed.

#### CURRICULUM DESIGN GRID

Individual I	rogress	← Knowledge	, Skills, and	Attitudes>
Advanced Stag Development in the Subje  Continuous Progress  Beginning Kn Skills, Attitud	Non Graded  nowledge,	ESSENTIAL FOR THE EDUCABLE	DESIRABLE FOR MOST	ENRICHING FOR THE TALENTED

Obviously, an artificial division of language instruction into such segments as "first year French" or "second year English" violates the foregoing requirements. Year-long courses with <u>annual</u> promotions or failures bring inefficient uses of pupil and teacher, time and energy, build frustrations, and encourage unwarranted traumatic examinations. The curriculum design should provide more frequent check points. The length of the segments in this continuous progress program might vary, possibly ranging from four to eight weeks.

The expected pupil goals in each curricular segment in the sequence should be clearly stated to guide both teachers and pupils. The goals might well be separated into three categories:

1 - Essential - for students considered educable (those with limited ability to learn a second language)

- 2 Desirable for students of average talents and interests
- 3 Enriching for students of high talents and interests who expect to make some special use of the language

The proposed curricular organization is completely flexible. For example, many pupils want only to learn enough of a given language to "get by" as a traveler in the other country. They want to converse, to get some ideas from popular magazines and newspapers, and to understand directions in time tables, guides, and the like. They do not need "perfection" in any of those skills, nor do they need to read the "literature" of the country.... At the other extreme, some pupils are vitally interested in French or some other country's literature and wish to develop high levels of competence. The point is that schools need to provide a great variety of "courses" in each language, geared to the individual interests and talents of pupils. A flexibly scheduled program with self-teaching materials can meet those diverse needs.

The foregoing curricular changes make defensible a belief this writer has that every pupil should learn something about a culture other than his own -- and that he cannot comprehend that culture without using, at least in a limited way, the languages of that culture. He needs to read some popular materials -- simple newspapers and magazines -- with adequate understanding, to correspond with selected persons in their language, and hopefully to travel there sometime during his high school days.

The foregoing curriculum design is basic to the use of varied size instructional groups, flexible schedules, technical learning and teaching aids, and different evaluation techniques. A tentative structure based on the professional judgment of competent experts in language instruction will start the program. Experience and experimentation will provide revisions. However, a start must be made. Attempting to introduce new methods with a conventional curriculum organization inevitable will limit progress.

## 2. Instructional purposes and Group Size

Basic tasks of the modern foreign language teacher are to arouse student interest in learning to speak, listen, read, and write another language, to show them how to proceed, to give them help when needed, and to create the opportunity for individual and small group activities. Each of the foregoing tasks has its own optimum size group and educational setting.

· History

Much of the motivating, the showing, and even the helping can be done with relatively large classes -- termed here, <u>large-group instruction</u>.

Motivation comes from exciting teaching presentations, contact with the culture and appearance of the country (ies) whose language is being studied, through careful explanations of what the student is to do and how he is to proceed, and from providing immediate knowledge to the student regarding his learning success.

Purposes other than presentation and motivation are served by large-group instruction. Students working on programed instruction devices, usually programed textbooks, require a minimum of professional teacher supervision. They can work on programed books in large groups under the supervision of instruction assistants with a professional teacher available for consultation when needed.... Similarly, written examinations can be administered effectively in large groups.

Since students differ markedly in their abilities to acquire a second language, emphsis must be placed on individual opportunities to learn. Thus another phase of instructional numbers comprises one person or a very few students working together. We call this <u>independent</u> study.

The typical language laboratory provides for individual study in a group setting. Some laboratories have more than 100 listening and practice booths. The potential services of language laboratories are well known to this audience so they will not be discussed here. However, another type of independent study workroom also is desirable for individual or very small group study....

Some of the same programed instruction aids used in large-group instruction should be found in the workrooms along with specialized programed materials for remedial work and to provide instruction more advanced than that needed by average students. The workroom needs to provide frequently used printed materials, recordings, films (including 8mm. copies of films shown in large-group instruction), filmstrips, plus projectors, recorders, screens, and earphones), all the machines and tools useful to persons in the field represented by the subject, and any other learning aids that can help students in their search for existing knowledge and to reveal new frontiers.

Supervision of the workrooms should be done by carefully selected, qualified instruction assistants....

A third kind of grouping for teaching modern foreign languages requires classes with 15 or fewer students. This activity may be called, <u>small-group discussion</u>. The student discussions generally use the language being learned.

The conventional class of 25-30 students is too large for these learning experiences. Dividing the class into two or three sub-groups does not represent a good substitute for classes of 15 or fewer because a competent teacher cannot be physically present full time to assist each of these small groups.

Small groups are constituted on a variety of bases in accordance with professional decisions of teachers and counselors. A policy should be early established in the minds of everyone that the composition of small groups will be changed frequently. For example, if teachers and counselors determine that two or three students are dominating the discussion in a given group, it is good both for those students and the others, that they be transferred to another group which contains stronger student discussants. Both groups, the one they had been in and the new group, can benefit from this transfer and the groups in turn will have beneficial effects upon the individual students themselves.

These small classes of 15 or fewer students provide practice in the ultimate goals of modern language teaching. Student discussions using the second language practice and reinforce the skills and knowledge learned in large groups and in independent study. The discussions help to crystallize values and form attitudes in much the same way as these goals are accomplished in life outside the school The teacher casts himself in the role of listener, advisor, and as co-paricipant with the students in this enterprise.

Experiences in schools organizing small groups, and considerable research in group dynamics, indicates the maximum desirable size of these groups to be approximately 15. That is the largest number of students that logistically may have an opportunity to become actively involved in discussion during a reasonable period of time.

#### 3. Flexible Schedules

Just as standard-sized classes of 25-35 students for all instructional purposes get in the way of improving modern language teaching, so do standard length class periods scheduled regularly four or five days per week. The time for various activities also needs to vary with instructional purposes and student needs.

Schools in the U.S.A. that have flexible schedules usually follow one of two patterns. One method is to divide the time school is in session into a relatively larger number of shorter (usually 15 or 20-minute) periods (the term, modules is frequently used instead of periods). One or more periods are then used, depending on the activity. The other scheme, more rarely used but more flexible, is to abolish a predetermined schedule and make it up day by day, two or three days in advance, or for a week at a time, one week in advance. Teachers plan together in teams how the pupil's time will be divided.

One other characteristic of flexible schedules is a division of time between what pupils <u>must</u> do and what they themselves <u>choose</u> to do with their time. The <u>must</u> schedule is determined by the teachers; the <u>choice</u> schedule is determined by each pupil, subject to his counselor's approval. The <u>must</u> schedule may occupy one-half to two-thirds of the pupils school week.

Here are some illustrations. The modern language teachers, using the modular plan, might schedule students as follows:

Monday - 2 modules (40 minutes) - large group presentation
1 module (20 minutes) - language laboratory

Tuesday - 1 module (20 minutes) - language workroom

Wednesday - 3 modules (60 minutes) - large group work

Thursday - 1 module (20 minutes) - language laboratory

Friday - 2 modules (40 minutes) - small group discussion
1 module (20 minutes) - language workroom

Total per week - 220 minutes

The "must-choice" plan might work this way:

#### Must Schedule

Monday - 30 minutes - Film and teacher presentation
Wednesday - 60 minutes - Work on programed text
Thursday - 30 minutes - Language laboratory
Friday - 30 minutes - Small group discussion

Total <u>must</u> 150 minutes

To which a student might add 30 minutes on Monday, 45 minutes on Wednesday, and 60 minutes on Friday in the language laboratories and work rooms -- 135 extra minutes -- because he wants to do some extra work.

The ultimate goal of returning control of time to teachers and pupils calls for more flexible arrangements than the foregoing illustrations provide. The pupil's schedule in foreign language, as in all other subject areas, should include only two class meetings per week, each 30 minutes in length. One session is in the large group for the teacher's motivational presentation -- and the other is in a group of 15 or fewer pupils to learn how to carry on an oral discussion and to develop better interpersonal relations. The pupil's regularly scheduled "classes" in all subjects thus occupy only eight hours per week, leaving him 22 hours for a variety of independent study activities (reading, listening, viewing, doing, evaluating -conversing, working individually or with one or two others or in a remedial or advanced group -- taking field trips -- eating and relaxing). How much of those 22 hours a given pupil spends on a foreign language (or on other subjects) depends on his interests and talents by means of a cooperativelymade decision by the pupil and his teacher-counselor. The decision may be altered any time because the pupil's schedule is made by his counselor and him, no longer controlled by a central school schedule or one that is computerbased.

## 4. Educational Facilities

An improved program requires better use of school buildings and the tools of teaching and learning....

Consider first some costly features of conventional schools. Expensive building features include multi-purpose classrooms, corridor space, auditorium and cafeteria areas with low utilization percentages, and decorative features that contribute little to the educational process. For example, large-group instruction spaces can accommodate twice as many students, and small-group discussion spaces fifty per cent more, than can be housed in multi-purpose classrooms. Costly corridor spaces may be greatly reduced by flexible schedule arrangements which do not place all students in corridors at the same time. Compact buildings that utilize carpeted independent study areas also for passage space reduce the need for separate corridors. Operable walls in auditoriums and cafeterias can greatly increase their utilization for large-group instruction, thus reducing the need for conventional classrooms and for certain other spaces.

Specialized facilities for large groups, small groups, and independent study provide for more students in less total space than in a conventional school. The money saved on the building can be used to provide more tools for

learning, placing them in specialized rooms. New buildings can be smaller when planned to incorporate these new ideas or old buildings can be remodeled to accomodate more students using specialized rooms.

Money can also be saved by expanding the proper use of large-group instruction, by permitting students to learn more for themselves under the supervision of instruction assistants, and employing less costly clerks and general aides for many present teacher activities. More money is needed to provide some classes of 15 or fewer for very specific educational purposes, to reduce materially the number of hours teachers are scheduled with student groups, to provide more technical and programed devices to aid teaching and learning, and to add workrooms for teachers. The savings can offset the extra costs to make the changes financially feasible. Doing one without the others may be an educational crime or an unnecessary waste of financial resources. In either case, the worth and lasting results of the innovation or experiment are lessened.

## 5. Evaluation Techniques

Evaluation needs to be a more integral part of the learning process in modern foreign language teaching rather than so much a competitive guessing game between teachers and students. Although some periodic checking of pupil progress solely by the staff is needed, in most cases the answers to various tests should be immediately available to students so they can check their own progress periodically instead of waiting until the end of a unit or a six-weeks period as too frequently is done today. This immediate reinforcement of student achievement, helpful both in motivation and future self-direction of student efforts, may be used effectively both in written and in oral language work.

Evaluation is closely related to large-group instruction. Presentations should be explicit in telling students what to do and how they may know how well they have succeeded. Student and teacher goals should be defined in terms that may readily be assessed by both groups.

The evaluation process needs to consider and to report honestly and discretely: (1) what students know and can demonstrate in speaking, listening, reading, and writing the second language; (2) desirable changes in pupil behavior, such as using the language with others outside of class, writing letters to persons in another country, reading materials in the other language, becoming interested in developments affecting other nations and

peoples, and improving in personal relations with other pupils; and (3) the quality of work done in independent study with a minimum of teacher supervision, that is, the extent to which the student has learned how to learn and has developed responsibility for his own learning.

Student motivation and other activities are affected by the evaluation techniques. Using conventional tests to appraise new teaching methods usually does not produce statistically significant differences in pupil learning. It has been said that innovators are not evaluators. But the converse is also true; evaluators are not always innovators. Obviously, the two go together.

## 6. Instructional System

...all parts of any instructional program are related. All aspects must be carefully planned with reference to each other if maximum potential gains are realized....

A first step in developing a system is to answer the following three questions:

- 1. What can different types of students learn largely by themselves if time, properly equipped spaces, and adequate aupervision are available to them?
- 2. What can different types of students learn from presentations by others?
- 3. What instructional goals require personal interactions among students and teachers?

Those planning the system need to analyze various units or topics in the curriculum in order to arrive at a workable program. For example, under Question 1, decisions need to be made relative to the programed instruction devices, the laboratory tapes, the books, the films and recordings, the guidesheets, and other materials that are to be available for high, average, and low ability students and for those with high, average, and low motivation—with all the possible combinations of those factors.

Question 2 requires decisions regarding what materials are to be presented, to what students, by whom, and with what types of technical aids. Similarly, Question 3 is answered in terms of what sized groups, of what composition, for what purposes, and what materials are needed.

The foregoing three parts of the instructional system--independent study, large-group instruction, and small-group discussion, respectively--are coordinated. The quality of independent study depends much on the effectiveness of large-group instruction. A teacher meeting with a small group has the responsibility to observe matters that need to be presented more effectively in large groups and to appraise the quality of those presentations. Special projects completed by students during individual and independent study may be discussed in small groups or may form part of a large-group presentation. More of these relationships appear as these three instructional phases are examined more specifically.

An individual with the time, the motivation, the assistance, and proper facilities can learn many things without immediate faculty supervision. Of course, wide variations in this regard appear among students; as a matter of fact, these wide individual differences account for the emphasis that needs to be placed on individual study. For example, students use programed instruction devices (programed textbooks and teaching machines) to learn vocabulary and sentence construction. They work in language laboratories or with tape recorders to improve their pronunciation of the language. They take home the recorded lessons to study with their phonograph or tape recorder. They go into libraries and resource centers to prepare special reports on some subject related to the language.

Large groups are appropriate for such activities as providing students with some cultural background of the country whose language they are learning; presenting a play in the language; introducing someone from the community who speaks the language or has been to the foreign country; explaining basic grammatical forms and vocabulary information; as a setting for using programed instruction books; and for giving tests.

Small-group discussion is appropriate for practicing conversational ability in the foreign language. The small group is essential so that all students are closely involved as they sit in a circle around a table. The logistics of the situation provide time for each student to participate not once but several times during a class session and for the teacher to be sufficiently close to students to hear what they say and to make suggestions. Incidentally, these conversations should involve topics of importance, for example, the common market or an international crisis affecting the country whose language the students are learning. Too many conversations in conventional foreign language classes concern unimportant and uninteresting topics.

An instructional system combines the foregoing aspects into a carefully organized program for teaching and learning. The following steps are suggested:

- 1. Agree on the knowledge, skills, and attitudes to be developed.
- 2. Specify activities for achieving the purpose listed under Number 1.
- 3. Analyze the supportive relationships among the accepted purposes and activities.
- 4. Build the educational program.
- 5. List the materials needed in relation to the program.
- 6. Develop measures of achievement related to Number 1.
- 7. Evaluate the effectiveness of the various components of the system.

Thus the instructional system that needs to replace the usual class becomes apparent. The conventional class of 25-30 is not right for anything in modern foreign language study. It is too large for conversation, too confining for independent study, too limited in the facilities provided, and unnecessarily small, for financial as well as educational reasons, for large group instruction. The conventional system is wasteful of teacher competencies and time and fails to recognize adequately the vast range of individual differences among students—and among teachers....

# 7. Reeducating Teachers for Changed Roles

The teachers, of course, are the most crucial element in any program to improve modern language teaching. All of the foregoing changes will succeed to the degree that teachers learn different instructional roles and try constantly to improve what they do.

Teachers in the United States typically now spend 40-50 per cent of their time in conventional classes lecturing, showing films or watching TV lessons, or giving tests. They can change very easily, therefore, to large-group instruction. However, merely changing the numbers of students is not enough...The teacher chosen for the presentation must prepare better, select information more discriminatingly, enliven the message more with audio-visual aids, and do better the other tasks suggested earlier.

Teachers working with small groups must avoid the oral quizzing that is wrongly called "class discussion" in today's schools. The potential gains in small groups are lost unless teachers learn new roles as consultant, observer, and counselor, and help pupils to learn new group member roles.

The independent study efforts of students will be bland indeed if their assignments approximate today's homework. Teachers must learn how to define what they expect of students, how to stimulate best efforts, and how to reward individual pupil responsibility for learning and for creativity.

...teachers must be redducated in service to improve modern foreign language teaching. Briefly outlined, here is what needs to be done:

- 1. Present the new ideas to teachers through talks by knowledgeable persons, through films and filmstrips, or by television (the techniques of large-group instruction).
- 2. Suggest further readings and materials to be viewed, listened to, and studied (the procedures of independent study).
- 3. Organize small groups to discuss, clarify, reach decisions, and plan (the methods of small-group discussion).
- 4. Work with teachers on <u>preliminary</u> activities of curriculum revision, flexivle schedule arrangements, evaluation techniques, and the development of the instructional system. The word, <u>preliminary</u>, is emphasized; to do the whole task before the program starts would be overwhelming, therefore, unwise.
- 5. Organize a summer training clinic, with students present, so teachers may learn how to engage in large-group instruction and small-group discussion and to stimulate independent study. The teachers can prepare materials, perform different roles, and criticize each other—all with the aid of knowledgeable consultants. Such a summer program should occupy at least three weeks of time.
- 6. Organize teachers into teams, so they may work together in deciding who is to do what. The teams need to plan, work, and evaluate together. They may learn from each other as they profit from better utilization of their professional talents.
- 7. Provide teaching teams with clerks and instruction assistants. An instruction assistant typically is a part-time employee with reasonable competence in the foreign language being taught, but who lacks either full university qualifications to teach or the time to be a regular teacher. Such persons are found among advanced college students, housewives, and retired teachers.
- 8. Arrange teacher schedules so they have time and places during the school year to continue to study, to prepare better, to observe and criticize each other, and to improve evaluation. Too much time is spent by teachers with student groups in the conventional school. The necessary reduction in time is financially and logistically possible by the savings resulting from large-group instruction and by having students learn more by themselves, mainly under the supervision of instruction assistants.

9. Supervise systematically the language teachers in the places they teach. Faculty meetings and supervisory bulletins are not enough. The school principal and his assistants need to visit the various places to check on what teachers are doing, and to note methods used in appraising and reporting pupil progress. Conferences then develop ways to improve teacher activities.

## Summary and Conclusion

Significant improvement in modern foreign language teaching and learning requires fundamental changes in the organization of instruction. Piewemeal changes will produce disappointing results--or at best, fewer gains than otherwise might occur.

Revisions in curriculum content, pupil groupings, pupil and teacher schedules, educational facilities, evaluation techniques, and teacher education are proposed in a carefully coordinated instructional system.

The NASSP has some pilot projects to start in 1969 to test further the proposals suggested in this presentation. The proposals are discussed in more detail in two books, Focus on Change-Guide to Better Schools, and Secondary School Curriculum Improvement - Proposals and Procedures. The author also has written a number of papers which may be obtained without charge from the NASSP.

<sup>1</sup> Trump, J. Lloyd and Baynham, Dorsey. <u>Focus on Change-Guide to Better</u>
<u>Schools</u>. Chicago, Illinois: Rand McNally Company, 1961. 147pp. (Seventh printing, 1968).

Trump, J. Lloyd and Miller, Delmas F. Secondary School Curriculum Improvement - Proposals and Procedures. Boston, Massachusetts: Allyn and Bacon, Inc., 1968. 408 pp.

<sup>&</sup>lt;sup>3</sup>E.g. "Needed Changes for Further Improvement of Secondary Education in the United States," "How Excellent Are Teaching and Learning in Your School?," and "Providing More Equal Educational Opportunities for Youth."

## Flexible Scheduling at Brooklyn College

Charles G. Hill

In the next few minutes I should like to give a brief general view of flexible scheduling at Brooklyn College: first, within the framework of established courses; then, flexible scheduling of regular courses within the established curriclum; and lastly, flexibility of curricula and programs to meet the needs of particular groups of students.

Within the framework of established courses, the language lab comes to mind first. Lab sessions are voluntary, and therefore flexible, only because the administration does not allow credit for a regularly scheduled lab period. The facilities of the library lab have been expanded many times since its inception, and they now serve hundreds of students most effectively, especially in the elementary courses. We also have one section of elementary French taught with the aid of a computer (flexible programing rather than scheduling, perhaps), and the results have been encouraging, though inconclusive. Perhaps the most interesting flexibility within the course framework is the Honors program, which is not confined to any department. Students who show exceptional ability in any course may be encouraged to pursue an independent project and released from class attendance for a part of the term for this purpose. The completion of the project usually results in honors credit for the student; this program is especially effective in advanced courses where research papers are required.

Flexible scheduling of courses within the established curriculum is done primarily through advanced placement and exemption examinations. I assume you are familiar with the former, and exemptions are really an extention of this practice. Any student with an above average record may take exemption exams in up to fifteen credits of work. In lower level courses he is given a syllabus in a central office and takes the exam on a stated date. A grade of A or B gives him credit for the course, a C exempts him from it without credit. Exemption exams in advanced courses may be given by any department at any time through one of its members, and the same grading system applies. These exams enable the capable student to accelerate in his required courses, to complete prerequisites and to cover the material in courses he is unable to schedule for one reason or another. Over 800 students took advantage of this opportunity for independent study during the last academic year. In a more recently instituted program, juniors and seniors are also allowed to take one free elective in each of their last

four terms on a pass-fail basis, receiving credit but no grade. While these programs effect only individual courses, the Scholars program is designed to create an independent study situation for the exceptional student throughout his four years. A limited number of high school seniors are admitted to the program each year on the basis of recommendations and interviews as well as grades, and a few more are added during their freshman and sophomore years. Students in this program must meet the normal requirements for graduation, but have the privilege in any course of arranging not to attend class, but to work independently with their own or another instructor.

I shall mention only a couple of things about flexibility of curricula and programs, since this touches only indirectly on our subject. We are currently experimenting with a curriculum in which about one in six students admitted each fall is permitted to take many fewer required credits than the present core of more than half the total credits needed for graduation. This enables him to explore new areas of to concentrate more fully on his major. There are also two programs set up especially to admit more students from disadvantaged areas, under which certain matriculation requirements are relaxed, and students are provided volunteer tutoring and sometimes special classes to help offset their academic deficiencies, if any, on entering.

These remarks are very general, and I would of course be happy to cite more precise statistics and to discuss my personal experiences with these various programs should there be questions later.

## Frederick R. Burkhardt

There is no total school modular scheduling at Farmington High School. However, I have been fortunate to have been in a position as chairman of a modern language department that has had several working experiments in modular scheduling within the department itself.

We have been able, within the rather traditional seven period day, to schedule all language laboratory sessions on twenty minute modules, making it possible to schedule double the number of students to this facility. This has also allowed us to be very flexible, giving opportunity to the teachers to sign up a day in advance for use of the laboratory rather than to be assigned specific days and periods for class use. By releasing the laboratory from traditional full period scheduling and by adopting the twenty-minute module, we have made it possible to:

1. use the laboratory at the moment when it is needed and will serve best for learning.

- 2. schedule parts of class groups or individuals to the laboratory for necessary drill when it is most appropriate.
- 3. when classes are larger than laboratory facilities (and fortunately we have few of these) we can schedule class instruction for some while others are at laboratory practice.
- 4. afford laboratory drill to those students who are in traditional study hall groups who may wish it.

Our laboratory program could be improved by the addition of more facilities and by the employment of a teachers' aide to staff it. If and when the school does adopt a total modular system (and the modern : language department strongly feels that it should), it would seem from our experience that staffing of the laboratory facilities and additional electronic resources will be necessary, especially if students will be expected to make use of their unscheduled time. It will be increasingly important to staff the laboratory facilities if the student arrives as an individual and requests a specific tape for use. It would seem that schools where such tapes are accessible by a dial-select process, being stored in electronic banks, would be in a superior position for entering a system of modular scheduling.

We have adopted an un-graded program of foreign language instruction which allows for the continuous progress in language learning by the student. Under such a system, it is extremely important for the department to be able to reschedule students; for flexibility is an absolute requirement of the program. A student must be placed in a group in which he has the most affinity so that fewer groupings within the larger class unit are necessary. To accommodate this requirement of our program we have adopted modules of varying length within traditional class periods, thus allowing us to pursue our program. In both French 5 and Spanish 5 we have broken our groups into as many sub-groups as necessary, sometimes as many as seven for a class of twenty-two, and rescheduled the students for specific modules of time for instruction, independent study, and laboratory work. This involved the following:

- 1. Rescheduling some students from study hall and some teachers from planning periods to meet together as subgroups on one or more days per week as a substitute for the regular class period.
- 2. Rescheduling some students to meet part of the regularly scheduled period with the assigned teacher, and part of the regularly assigned period in independent study.

- 3. Rescheduling some students to meet only on specific days during the regularly scheduled period with more emphasis given to self and independent study.
- 4. Forming a "team" of teachers who work together in the teaching of a course for specific units and blocks of time.
- 5. Making use of students to assist in the drilling of specific items.
- 6. Rescheduling a student whenever it was necessary throughout the year.

We found, however, that conflicts with the traditional scheduling and rigidity of schedule in the rest of the school have caused us problems in implementing such modules in levels one, two and three, where up to four sections of the level must meet at different times of the day.

What are the results of this adaptation within the department?

- 1. Each student was able to progress in the unifying of the four skills into a cohesive unit at his own rate of learning.
- 2. Students profited in that their learning was relevant to their personal needs.
- 3. Students were able to continue their progress in learning the foreign language from the point at which they were proficient rather than falling farther and farther behind.
- 4. Programs were individualized to improve those of the four skills which were found to be weak.

And one really lasting result: we have been able as a department to demonstrate to the faculty of the school that modular scheduling does aid in the teaching process, that it is not mass confusion, but a necessary means to reach a goal — the most learning possible for each student. We like to feel that we in the modern languages have planted a seed, an idea, which will, we hope, grow into full-bloom with all departments in the very near future.

#### Dr. Delio Rotondo

For many years educators have been concerned about the lock-step curriculum, the lack of flexibility in secondary programs and the lack of opportunity for

students to become involved and to accept responsibility for their own education. The traditional schedule appears to be designed more for administrative convenience and control than to provide teachers and students with alternatives in planning for more appropriate structure in class periods or to provide for opportunities to accommodate the needs of students who have varying abilities and interests in their courses.

The modular flexible schedule provides teachers the opportunity to make decisions about how their subject should be taught in terms of time and class sizes. It is, however, only a tool, or a means to an end. The purpose it should serve is to break the lock-step in program and to make it possible for each student to learn individually and to progress at his own rate.

One of the characteristics of flexible scheduling is a somewhat higher percentage of unassigned time for students and teachers than in a traditional schedule. It is this unassigned time that provides much of the opportunity for the individualization of instruction through the use of individual conferences, remedial and enrichment groups, special interest sections and student independent study. Conversely, it is this unassigned time that causes concern on the part of staff and the community, especially as it relates to unmotivated students. The challenge to teachers is to change this approach to instruction so that students are give opportunities to do for themselves some of the things that are done for them in a traditional class. Students should be allowed to discover more and be told less than has been the usual practice.

Foreign language departments in schools operating with flexible schedules have tended to remain very close to traditional time and student grouping arrangements. Large group instruction or class periods of more than 45-50 minutes have not, at least up to this time, appeared to offer any benefits.

What affect, then, has flexible scheduling had on foreign language instruction?

One of the immediate effects is on student enrollment in foreign languages. Students, in a flexibly scheduled school, can elect a second language or a needed science or mathematics course without dropping the first language course. In other words, all students do not have to carry the same number of courses. Further, some students in advanced foreign languages, or in a language not normally offered, can be carried on an individual basis. For future consideration, the foreign language department can plan programs for students who wish to continue study of a foreign language in an intense, concentrated manner at the advanced level as opposed to those who merely wish to maintain contact with a language, thereby reducing the number of students who drop out of foreign languages because of the time required and the pressure of other committments.

Flexible scheduling has had a tendency to break the lock-step arrangement of the program. In North Haven this movement began prior to the adoption of flexible scheduling in the Latin program. Under the flexible schedule, placement of students in groups according to performance criteria rather than the number of years spent in class has been greatly facilitated. This concept is beginning to be implemented in French and Spanish where the criteria for placement is somewhat more complex.

At this point, small groups and individual conferences are proving to be the most widely used and most promising features of the flexible schedule. Some students in Advanced Spanish pursue this study completely on an individual basis. One student is studying Italian and one is studying German - courses not normally offered at North Haven - on an individual basis. French VI is offered with very limited structured time, with scheduled individual conference time and definite responsibilities to be met by individual students a part of the requirements of the course. Part of the French VI student responsibility is to work with at least one student at lower levels of French thus reinforcing their own conversational skills and knowledge of the structure of the language.

The use of unstructured time by students for independent study or for self-instruction poses a serious problem for foreign language teacher's especially with students at the beginning stages of a language. There has been little commercially prepared material suitable for such a program. However, during the one year of working under a flexible schedule; teacher-prepared materials and commercial materials, mostly in the form of tapes and slides, have begun to be adapted for tutorial, remedial and enrichment purposes for students to use in their unassigned time. The use of aides - qualified community people and graduate students from nearby colleges and universities - to offer tutorial assistance, or enrichment in the form of conversation groups during student unassigned time has added another dimension to the foreign language program.

The alternatives under flexible scheduling are nuch more varied. Perhaps the most limiting factor is the limited vision of professional educators due to traditional training. The involvement of the staff in the constant evaluation of the various elements of the program is one of the beneficial side effects of flexible scheduling. Constant re-assessment of weekly time allocation, the distribution of time throughout the week, grouping arrangements, appropriateness of assignments, developing responsibility of students for their own education all become matters of prime concern. Most of these items in a school on a traditional schedule receive little or no attention from the staff because there is usually no alternative.

In spite of the many problems involved in implementing a flexible schedule, there is a general feeling that the first step in providing truly individualized programs has been taken. There is much yet to be done, but with the many alternatives available and encouraged by occasional successful practices, the ultimate goal of providing individualized programs seems, at least, a definite possibility.

## Dr. Ira J. Singer

Before any flexible schedules can be adopted, curriculum should be made relevant and current. It is a waste of time, effort and funds to re-design buildings and plan new schedules in order to accomodate dull and obsolete curricula.

Teachers of Foreign Languages should teach about the riots at the University of Mexico in the same breath as they discuss similar unrest at Columbia University -- in the native language. One might find the young-sters interested in discussions of the urban development of Bridgeport while studying the urban development of Sao Paulo. The roles of the urban designer, worker, resident must be defined in both locales; why not in the native language? Perhaps reverse work-study programs with suburban students working part-time in grocerias and other retail establishments serving foreign speaking populations might help the student to learn the language and the man who speaks it. Teachers working in teams might plan the week's science experiments or demonstrations communicating all written and verbal directions to the student in the language under study.

These and many other ideas and activities invented by imaginative teachers could best be incorporated in a school that is willing to create time slots for large group instruction, small group discussion and independent study. Three typical examples of flexible scheduling related to different types pf team teaching patterns follow:

Single-discipline Team -- The single-discipline team usually consists of two or three teachers from the same department, teaming together to instruct a common set of students. Teaching periods may be scheduled side by side or consecutively.

For example, the teachers of two tenth-grade social studies classes may team during the first period of each day so that each teacher can instruct that phase of the course which he can best handle. This arrangement exposes a teacher's specific talents to twice as many students as in the conventional schedule (Figures 1 and 2).

Such a team may be organized to permit a new teacher to work with a veteran teacher, providing a built-in-service program. With an instructional assistant, a clerical aide and additional planning time, the team members can practice continuous curriculum planning and revision based on the needs of their students as well as their own assets and abilities. To further the activities of this team, community resource specialists, outstanding films, self-instruction programs and other essential technological learning tools can be brought into the pattern.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-	Hist. 10A				
8:50	Hist. 10B				

Fig. 1. - Conventional Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
	,	History		History	History
		10AB1*		10AB1*	10AB
		(SG)		(SG)	(IS)
	History		History		Project
	10AB	History	10AB	History	work in
-00:8	(LG)	10AB2	(LG)	10AB2	li <b>br</b> ary,
8:50		(SG)		(SG)	laboratory, music room,
		History		History	art studio,
		10AB3		10AB3	etc.
		(SG)		(SG)	

<sup>(60</sup> students, 2 teachers, 1 instruction assistant)
\*One History 10AB-SG can be supervised by an instruction assistant,
student teacher or student leader. IG = large group, SG = small group,
IS = independent study.

Fig. 2. - Single-Discipline Team Schedule



Although this type of team is most often restricted to a single forty-five or fifty-minute period, alternate possibilities do exist for providing large group-small group-independent study instruction during the fixed period. For example, one team member of a three-teacher team can present large group instruction to sixty students of a ninety-student group. While he lectures to the sixty, the remaining thirty may be broken into two groups of fifteen. Each group is then assigned to another team teacher or instructional assistant. The students may then be rotated through the special size groupings according to a formula set by the team (Fig. 3). Although this is not the most desirable system, it does afford some flexibility when team activities are restricted to the fixed daily period.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
	Group Al, A2, A3	Group B&C LG-30	Group Al,	Group A3, B, C	Group Al
	IG-60 students	students	IG-40 students	LG-50 students	SG-20 students
	Group B SG-15 students	Group A IS-20 students	Group A3 IS-20 students	Group Al SG-20 students	Group A3 SG-20 students
3:00 <u>-</u> 3:50	Group C SG-15 students	Group A2 SG-20 students	Group B SG-15 students	Group A2 SG-20 students	Group B IS-15 students
		Group A3 SG-20 students	Group C SG-15 students		Group C IS-15 students
					Group A2 IS-20 students

<sup>(90</sup> students, 3 teachers, 1 instructional assistant)

Fig. 3 - Flexibility for Single-Discipline Within a Daily One-Period Schedule

Occasionallly, the single-discipline team may be organized on a block-of-time schedule. However, this arrangement is usually reserved for the interdisciplinary or school-within-school team.

Interdisciplinary Block of Time Team — The inderdisciplinary block of time team consists of teachers from different disciplines given a common block of time to use as the team sees fit for the instruction of a common set of students in classes of flexible size.

For example, an administrator may assign a two-period block of time to a social studies/English team; a three-period block of time to a social studies/English/Foreign Language team, etc. Once the block is assigned, the team assumes the major responsibility for scheduling large group, small group and independent study activities within the block (Fig. 4).

Time	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00 9:00	and a second and a second to second the bridging lot.					
10:00	10:00 Team Planning					

Fig. 4. - Interdisciplinary Block of Time Team

This type of schedule permits the teacher to reduce such undesirable practices as padding or cutting lessons in order to meet a static bell schedule. In the illustration, the 120-minute block may be treated as a weekly or daily figure. The team may prefer to schedule a weekly 600-minute block (120 x 5) rather than the daily 120-minute block. They may set certain goals for the week and assign chunks of time for large group, small group and independent study. They may look at the block as a monthly interval and devote entire weeks to one type of

activity or another. Whether daily, weekly or monthly, the team can divide the block into modules of fifteen or twenty minutes and fit the various large group, small group and independent study activities into multiples of these modules.

School-Within-School Team -The school-within-school team consists of teachers from all disciplines, responsible for the instruction of the same body of students over an extended period of time, usually two to four years. Flexibility in class size and schedule is maintained in this pattern.

The primary purpose of this type of team is to encourage a closer relationship between teacher and student within any and all disciplines. In a large school, the loss of identity suffered by some students might be compensated by placing them in a smaller "division" of the larger school. This "division" may be called a house plan, a form, a school or some similar name. By using the shifting patterns of the team arrangement, teachers observe the behavior and performance of their students in various learning situations during this extended period of time.

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